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IN THE

SUPREME COURT OF THE UNITED STATES

No. [redacted] 4

CONCRETE MIXING & CONVEYING COMPANY (a Corporation),
Plaintiff-Petitioner,

vs.

R. C. STORRIE & COMPANY (a Partnership),
Defendants-Respondents.

REPLY BRIEF FOR PLAINTIFF-PETITIONER.

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IN THE

SUPREME COURT OF THE UNITED STATES

No. 528.

CONCRETE MIXING & CONVEYING COMPANY (a Corporation),
Plaintiff-Petitioner,

vs.

R. C. STORRIE & COMPANY (a Partnership),
Defendants-Respondents.

REPLY BRIEF FOR PLAINTIFF-PETITIONER.

Respondents' Erroneous Statement of What Is Covered by McMichael's Claims.

Respondents' counsel, at page 25 of his brief, appears to be laboring under a misapprehension of what is covered by the McMichael claims. In referring to the McMichael claims in suit, he says:

> "Stripped of meaningless words the broadest of these claims cover the **bare thought** of filling a hopper with concrete, making the hopper air tight, **and introducing air under compression** into the hopper to force the concrete out through a discharge pipe to the desired place of use." (Bold-face ours.)

Thus respondents' counsel would have it appear that McMichael's claims cover only the **bare thought** of introducing air into an air-tight hopper or container containing concrete, and that the claims in suit are silent as to the vital and indispensable feature of the McMichael apparatus, viz., the high velocity nozzle, located just where the concrete is compacted in passing from the tapering portion of the container into the discharge conduit.

Why does counsel for respondents prefer to ignore the velocity nozzle? Because it is a novel and essential element of McMichael's claims. Without the velocity nozzle it is impossible to get the combination which is essential to practical operativeness, viz., pressure behind the mass *plus* a high pressure jet of air at the point where the concrete is compacted in passing from the container into the conduit.

Mr. Townsend knows that his clients' machine would be useless for placing concrete if its velocity nozzle were eliminated. He cannot find any such nozzle in the prior art. He knows it was new with McMichael. Therefore, he does not care to talk about it.

The Claims in Suit Do Feature the Velocity Nozzle.

The claims in suit are Nos. 1, 2, 17, 18, 24, 29, 34 and 35.

CLAIM 1.

There is no question about the fact that this claim calls for the velocity nozzle, in the critical and necessary position. The claim, after calling for "two compressed air inlet pipes connected to the chamber," says "one of them terminating in a **nozzle inside** of the chamber **directed toward the opening** into the said conduit and the other pipe opening into the chamber at a point remote from said **nozzle.**"

CLAIM 2.

Claim 2 calls for the velocity nozzle in the following language "and **another** compressed air inlet pipe leading through the chamber wall and terminating **within the chamber near the opening** into the conduit in a nozzle directed toward said opening."

CLAIMS 17 AND 18.

After calling for the other essential elements, including the means for placing air pressure behind the mass of concrete in the chamber, each of these claims calls for the velocity nozzle in the following language: **"and means for causing a jet of air to impinge upon successive portions of the mass in the general direction of the discharge duct to directly assist their movement therethrough."**

CLAIM 24.

This claim, after reciting the chamber and its relation to the discharge conduit, calls for the velocity nozzle in the following language: **"and means for directing a pressure agent into the discharge duct in the general direction thereof to engage sub-masses of the materials and aid their movement through the duct to the discharge point."**

CLAIM 29.

This claim calls for the velocity nozzle in the following language: "and a **means** for supplying a jet of fluid pressure agent in the general direction of the duct **at a point adjacent its point of connection with the chamber** to engage sub-masses of materials to assist their movement through the duct."

CLAIM 34.

This claim, after calling for other essential elements of McMichael's combination, including "manually controllable means for supplying a fluid pressure agent to the chamber back of a mass of materials contained therein," calls for the velocity nozzle in the following language: **"and manually controllable means for directing a fluid pressure agent into the discharge duct in the general direction thereof."**

CLAIM 35.

This claim calls for the velocity nozzle in the following language: **"and means manually controllable independently of the aforesaid means for directing a fluid pressure agent into the discharge duct in the general direction thereof."**

Thus it appears that the velocity nozzle, an absolutely essential feature of the McMichael apparatus, is as a matter of fact recited and stressed in all of the claims. Respondents' statement of what is covered by the claims in suit is shown to be erroneous.

INFRINGEMENT.

The Holdings of the Ninth Circuit Court of Appeals, and Judge Bourquin, on the Question of Infringement Are Inconclusive, for the Following Reasons:

1. Infringement *per se* is not a question of fact. It is a question of law, depending upon the interpretation of the patent and its claims. The lower courts in this case erred in failing to follow the courts of the Second Circuit on a question of law, *i. e.*, the scope to be accorded the McMichael patent when interpreted as a legal document.

2. The essential facts concerning the construction and operation of respondents' apparatus are obvious from an examination of the apparatus itself. There can be no dispute here as to the essential features of that apparatus and there was no such dispute in the lower courts.

3. Taking the wholly undisputed facts as found by the lower courts, and admitted by the respondents, there is a clear case of infringement when the McMichael patent is given its proper legal construction.

4. In considering the question of infringement, the courts in the Ninth Circuit did not pass upon the McMichael patent as a legal document. To the contrary, they held non-infringement because of certain unimportant differences between the illustrative embodiment of the invention shown in the McMichael patent and the structure and movement of material in respondents' apparatus;—variations which are clearly and properly covered by the patent.

> "The question of infringement or no infringement is one of law, and susceptible of determination on this writ of error."
>
> *Singer Mfg. Co.* v. *Herman Cramer,* 192 U. S. 265, 275; 48 L. Ed. 437, 444; 24 Sup. Ct. 291.

> "When the question of infringement depends entirely upon the construction of a patent, either upon its face or in connection with facts of such a nature and effect as not to be reasonably disputed, the question is one of law for the court."
>
> *Western* v. *Robertson,* 142 Fed. 471; 73 C. C. A. 587.

The case of *Stilz* v. *United States,* 269 U. S. 155; 70 L. Ed. 202 (cited by respondents), is not in point for the reason that in that case the holding of non-infringement by the lower court was based *on a finding of fact* as to the construction and operation of oil burners used by the United States. The Court of Claims found that

> "It does not appear that any of the devices of the plaintiffs' said Letters Patent . . . *have been manufactured or used by the United States,* or that said Letters Patent have been infringed by the United States."

Infringement may sometimes depend solely on the question *as to what the defendant has actually done,* as in the Stilz case, and in such a case it is a question of fact. In the present case it is not even a *mixed* question of fact and law; it is substantially a pure question of law, that is to say one involving the interpretation of the patent as a legal document.

Respondents' counsel, at pages 5-8 of his brief, would have it appear that there is a disputed question of fact concerning the machine which Oxenham saw in operation on October 10, 1923, *i. e.,* a dispute as to whether this machine had its compressed air inlet at the back of the chamber *above* or *below* the top of the concrete mass. There is no such dispute.

Respondents' counsel believes, or pretends to believe, that we maintain that air was admitted through the *capped* pipe at the upper part of the rear wall of this machine. We make no such contention. We agree with

respondents' counsel that in both of respondents' machines (*i. e.*, the one which Oxenham saw and the later form of the Hackley patent) the air admitted at the back of the machine was introduced below[1] the top of the mass of concrete, that is to say exactly as shown and indicated opposite page 229 of our main brief.

Nor do the beliefs of the Ninth Circuit Court of Appeals, and Judge Bourquin, concerning the manner in which the concrete is forced through the conveying conduit, lend any conclusiveness to their holdings on the question of infringement. As the Second Circuit Court of Appeals said in the Powers-Kennedy case:

> ". . . the dispute seems irrelevant"
>
> 27 Fed. (2d) 670; and
>
> "The patent shows nothing which commits the patentee to the slug method of operation." (*Id.*)

The actual construction of one of the respondents' devices is set forth in the Hackley patent and application, and it is admitted by respondents that

> ". . . the Hackley patent as issued correctly describes the Hackley machine." (Respondents' brief, p. 8.)

Furthermore the respondents' machine in this case is substantially identical—but closer to the illustrative form shown in the McMichael patent—with the device which the Second Circuit Court of Appeals held to infringe in the Ulen case. A comparison of the two (our main brief, p. 76) will conclusively demonstrate this. One of the respondents' devices there illustrated is shown as it ap-

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1 As a matter of fact, the air inlet at the *bottom* of the chamber behind the mass is even more *fully* and *clearly* the compressed air inlet "behind the mass," within the language of McMichael's claims, than would be such an inlet located substantially above the bottom. Being on the bottom it is behind the *entire mass*, and must force the entire mass to the restricted outlet where it is compacted and then acted on by the velocity nozzle.

pears in the Hackley patent and therefore is *conceded to be correct.*

In *Continental Paper Bag Co.* v. *Eastern Paper Bag Co.*, 210 U. S. 405; 52 L. Ed. 1122, 28 Sup. Ct. 748, this court considered the question of infringement anew to the extent of deciding the scope of the claims and whether or not the lower courts were warranted in invoking the doctrine of equivalents and thus holding the defendant's device an infringement, saying:

> "The lower courts, therefore, found that the invention was a broad one, and that the machine used by the Continental Company was an infringement. And these were questions of fact upon which, both of the courts concurring, their findings will not be disturbed unless clearly wrong." (210 U. S. 416.)

In the present case the Courts of Appeals for the Second and Ninth Circuits did not concur, but differed radically in applying the patent to two substantially identical machines. This conflict, therefore, must be decided by this court. It is essentially a question of law as to the proper interpretation of the patent.

That the Courts in the Ninth Circuit Did Not Decide the Scope of the McMichael Patent As a Question of Law Nor Compare It With Respondents' Devices in Deciding This Case Is Apparent From Their Decisions.

The District Court noted that in respondents' apparatus the air pipes are

> ". . . pointing toward the discharge pipe, one opening into the entrance of the latter, one opening into the opposite end of the container." (R., p. 614.)

Thus finding air pressure behind the mass and at the outlet, as specified in McMichael's claims, the District Judge

refers to "plaintiffs' contentions," but not to the language of the specification or claims of the McMichael patent, and interprets these "contentions" to mean

> "that McMichael invented (1) the hopper bottomed container, (2) application of compressed air to convey concrete, and (3) the method of the lower air to detach portions of the concrete, which alternating with like slugs of air, are driven through the discharge pipe." (R., p. 615.)

He thus reads into all of the claims of the patent not only the hopper bottomed container, which is not referred to in any of the claims, except very broadly in claims 34 and 35, but also reads into all of the claims "slug action" which is not referred to in any of them, unless it be by the words "successive portions" in claims 17 and 18 and "sub-masses" in claims 24 and 29. He then turns to the prior art and states that "hopper bottoms" and "compressed air to convey mobile substances" were known.

The District Judge thus failed to consider the velocity nozzle at the entrance to the discharge pipe, and the combination of such a velocity nozzle with compressed air behind the mass, all of which is fully embodied in respondents' apparatus and entirely lacking in the prior art.

The conclusion of the District Judge on the question of infringement is

> ". . . that Hackley's apparatus is a different combination than McMichael's, has no *upright cylindrical hopper* bottomed container, is without the *U-bend*, employs no upper air save some incidental back pressure, does not discharge *slug fashion as claimed is the invention of McMichael*, and so, does not infringe." (R., p. 621.)

Thus—without referring to specification or claims—the District Judge reads *three limitations, i. e.*, "upright

cylindrical hopper," "U-bend," and "slug fashion" into the claims, notwithstanding that the claims themselves contain no such limitations, and ignores the vital and essential thing in the claims, viz., *the jet at the outlet combined with pressure behind the mass.*

The District Court therefore made a clear error of law in interpreting the patent, and because of this error held that respondents' apparatus does not infringe.

The District Judge found all of the elements of McMichael's claims in respondents' apparatus, failed to find such elements in the prior art, but held non-infringement by erroneously reading into the claims unessential elements not included therein and *expressly excluded therefrom.*

The "incidental back pressure" is no less back pressure, or *pressure behind the mass* than that of the McMichael patent and that of the devices held to infringe in the Ulen and Powers-Kennedy cases. It makes no difference, of course, how this pressure is produced or whether or not it is incidental to some other function. *It is absolutely essential,* and respondents do not question this fact. Furthermore, it is *inevitable* from the very nature of the apparatus and its use. When compressed air is injected into the vessel *at any point* it instantly establishes pressure behind the mass. Without that pressure the apparatus would not operate to move the material. Judge A. N. Hand (in the Powers-Kennedy case) said:

> "If this were not so, the high pressure through the discharge pipe would hold back the concrete." (Exhibit Book, p. 31.)

This pressure behind the mass is injected directly behind the mass (see pipe 17, Hackley patent, Exhibit Book, p. 78, and the same pipe numbered 4 appearing on the drawing opposite page 3 of respondents' brief).

The fact that it may also assist in pushing the mass of concrete along the bottom of the vessel simply shows that it serves a double purpose.

In the Ulen apparatus a plunger was used to do the pushing (p. 181, Ulen R.) and the pressure behind the mass was admitted in front of this plunger. In the Hackley apparatus one or more air inlets behind the mass are employed, but the operation is essentially the same, and in each case *pressure behind the mass* is present and essential.

The Ninth Circuit Court of Appeals Made the Same Error of Law in Considering the Question of Infringement.

The opinion of the Ninth Circuit Court of Appeals *neither quotes from nor refers to the language of the claims* which are the vital things in the patent. But the Court of Appeals treats the "slug theory," with which the claims are not concerned, as essential. Thus after devoting a large part of its opinion to the discussion of the slug theory the Court of Appeals said:

> "We think that the slug theory, when all is said, has no bearing upon the merits of the present controversy, for, whether or not the *appellant's* apparatus operated to deliver concrete in slugs or sections, it is very clear that the *Hackley apparatus* operates in delivering a constant stream of concrete, interrupted only so far as it is interfered with by the air which accompanies it through the discharge pipe." (27 Fed. (2d) 841.)

The Ninth Circuit Court of Appeals, therefore, read into the patent an unessential element, "slug action," which is not even referred to in most of the claims and is only indirectly suggested in others.

Here is a direct conflict between the Second Circuit Court of Appeals and the Ninth Circuit Court of Appeals

in the interpretation of the patent, the Second Circuit saying that the controversy over slug action is "*irrelevant*" since the patent *is not committed to any such thing* (27 Fed. (2d) 670), and the Ninth Circuit finding that the patent *is so committed* in order to find non-infringement. That the Ninth Circuit Court of Appeals is in error is manifest, on the fundamental principle in patent interpretation that an element cannot be read into a claim to avoid either anticipation or infringement.

The reference to "sub-masses" and "successive portions" in four of the eight claims here involved, *does not necessarily mean slug action.* It is stated that the jet engages successive portions or sub-masses. Obviously, it does, as these successive portions are forced into the outlet by the pressure behind the mass. Whether it separates them into slugs or piston-like sub-masses and thus propels them through the conveying conduit is not material, even in these four claims.

And the Ninth Circuit Court of Appeals finds that the Smith 1872 patent "contained all the features of the appellant's patent *except the nozzle for the admission of air near the point of exit,*" and that one of the pipes of the Duckham 1875 British patent was "**locatable** at the exit" —though not even suggested as being located thereat.

In *Permutit Co.* v. *Harvey Laundry Co.*, 279 Fed. 713, 718 (C. C. A., 2), the court said:

> "an invention, patented here, will not be defeated by a prior foreign patent, unless its descriptions and drawings contain or exhibit a substantial representation of the patented invention in full, clear and exact terms, so as to enable a person skilled in the art or science to which it appertains, without the necessity of making experiments to practice the invention. *Seymour* v. *Osborne*, 11 Wall. 516, 20 L. Ed. 33; *Gen. El. Co.* v. *Hoskins*, 225 Fed. 464, 140 C. C. A. 150."

Thus, in order to find non-infringement, the Ninth Circuit Court of Appeals reads out of the McMichael patent the most vital and important feature of *all* the claims, viz., the location of the jet at the outlet where it definitely will co-operate with the pressure behind the mass to perform the peculiar function essential to operativeness.

The Ninth Circuit Court of Appeals also refers to "air pressure *above* the contents of the tank" as essential to the patented invention, whereas pressure "*back of*" or "behind" the mass—whether above, below or on a level with it—is the essential thing of some of the claims and is not specifically mentioned at all in some of them. Claims 1 and 2 merely call for compressed air inlets "inside" the chamber or "remote from the conduit"—precisely as in respondents' apparatus—claims 17, 18, 34 and 35 say "back of" the mass, and claims 24 and 29 call for the "pressure agent" or "jet" *at "the discharge duct" only.*

The Ninth Circuit Court of Appeals, therefore, read into the patent this narrow, unimportant feature, expressly avoided in the claims, in order to remove the respondents' apparatus from the clear scope and meaning of the claims.

The Colored Drawing at Page Three of Respondents' Brief Is a Purely Imaginary and Fanciful Thing, and Evidently Intended to Beguile the Court.

No such action as that indicated takes place. With a total pressure of many tons on and behind the mass it must inevitably be forced into the small outlet where it is packed and would be jammed were it not for the jet or nozzle at the outlet which drives it through. Nevertheless, *even if the apparatus operated as respondents claim* it would embody the patented invention, since there

is, and must be, at all times, a pressure behind the mass to force it into the outlet and a nozzle at the outlet to force it through and along the conduit.

The Evidence in the Second Circuit Records and That in the Record of This Case Is the Same in Substance.

Judge Bourquin, the trial court in this cause, referring to the Ulen case, says:

> "The record of that case . . . differs from this at bar." (R., p. 610.)

He does not, however, point out any difference in substance either on the question of infringement or the question of invention.

The Ninth Circuit Court of Appeals likewise says of the Ulen case and the Powers-Kennedy case:

> "The decisions . . . relied upon by the appellant, were based on records widely different from that in the case at bar." (R., p. 678.)

But the opinion of the Ninth Circuit Court of Appeals does not point out any substantial differences.

The differences between the records in the Second Circuit cases and the record in this case are merely apparent. They are not real or substantial. Thus:

(*a*) The infringing apparatus in the Ulen case was a horizontal apparatus similar to that of the respondents in this case, but less like the illustrative embodiment of the patent than is respondents' apparatus.

(*b*) The prior art set up by the defendants in the several cases was the same in substance. The device of the Kolsche German patent is like numerous kinetic or flotation patents in the Ulen and Powers-Kennedy records and was actually pleaded in the

latter. Duckham is like the Trewent British patent No. 12,758 (Ulen R., p. 381), but farther removed from the McMichael patent. Both Duckham and Trewent show the conveyance of solid materials in a column of *water*.

(*c*) The Smith patent is in the Powers-Kennedy record and was considered by Judge A. N. Hand and the Second Circuit Court of Appeals.

The Larkin deposition not only fails to show any new or anticipatory matter, but actually proves the value and importance of McMichael's advance in the art.

Larkin admits (R., p. 513) that his experiments were abandoned because his apparatus *being without the outlet jet* "did not result in the production of a practically useful device or method" (R., pp. 509-10), and that McMichael's patent in suit solved the problem.

The Leake deposition and application add no new material of any kind.

Judge Bourquin and the Ninth Circuit Court of Appeals should have rejected the Leake deposition and patent application as worthless and this court should do so for the following reasons:

1. Leake's alleged experiment of 1905, even if it occurred as claimed by respondents, admittedly was entirely without the indispensable velocity nozzle. Therefore, it was an abandoned failure. It cannot anticipate McMichael's essential combination—pressure behind the mass *plus* the velocity nozzle acting on the concrete where compacted at the outlet.

2. The trial court never saw Leake, and, therefore, had no opportunity to judge his character, credibility or mental faculty. Your Honors are just as well able to judge the weight of the Leake deposition as was the District Court. Therefore the holdings of the courts below,

based on the Leake deposition, do not come under the Supreme Court decision in *Adams* v. *Gilliland*, 242 U. S. 350, which we have cited at page 124 of our brief in the Powers-Kennedy case.

3. The assignment by Leake to McMichael's attorney Bliss was dated December 2, 1910 (Exhibit Book, p. 479), whereas the decision giving McMichael priority over Leake was rendered before February 25, 1910 (*Id.*, p. 409), and the interference claims were relinquished and cancelled by Leake February 28, 1910 (*Id.*, p. 410), all more than nine months *before* any one connected with the plaintiff, or McMichael, acquired any interest in the Leake application.

4. Leake's alleged prior use about September 1, 1905 (R., p. 583), is completely answered by his oath in his application (Exhibit Book, p. 335), in which he swears that his invention was not in public use more than two years prior to September 21, 1907.

5. Leake's deposition is absolutely uncorroborated and unsupported by any other witness or by any contemporaneous writing, drawing, photograph or other tangible evidence whatsoever.

The Tests of the Smith 1872 Patent Prove Nothing But the Disingenuous Character of the Defense.

The statement of the Ninth Circuit Court of Appeals that the Smith 1872 patent contained "all the features of the appellant's patent *except the nozzle* for admission of air near the point of exit" (27 Fed. (2) 839) indicated a failure to appreciate the vital importance of the velocity nozzle. It also indicates the failure of the Court of Appeals to appreciate the importance of combined pressure *behind* the mass and at the *front* of the mass. The tests of the Smith apparatus, regarded as so important by the

Ninth Circuit Court of Appeals, were of no value because:

(*a*) The Smith apparatus has no velocity nozzle and therefore even if it were made to work after a fashion it obviously did not and could not work like the McMichael apparatus and respondents' apparatus which depend for their operativeness upon pressure behind the mass *combined with* nozzle action at the exit of the container.

(*b*) The material was forced only a short distance; it was a liquid mixture (which will not make concrete) and only a very small aggregate was used (R., pp. 447-9 and 465).

(*c*) The tests were made by witnesses employed by an infringer (*Id.*, 469-71). The witnesses merely say that they were "satisfied" with the test, but infringers are easily satisfied with the operation of a prior art device, even though they prefer to use and do use the patented device.

(*d*) The Smith patent calls for a mixture which has three-fifths the bulk of solid materials added to it in water. This makes the mixture three-eighths water or 37½%. This is three times the normal amount of water, which is usually about 12% (one gallon to one cubic foot) according to common knowledge and all of the authorities, including Department of Agriculture, Good Roads Section. 300% of the normal amount of water will make nothing but a thin soup of the sand and cement, will entirely separate this soup from the mass of stone, and will destroy the concrete mixture.

(*e*) But respondents' witnesses, in order to make a seemingly plausible test went far beyond the Smith patent and used a tank "two-thirds full of water" (Hackley, R., p. 439). This made the mixture, even

if the tank were entirely filled, *66% water.* This is not only an absurdity, but a fraud, and the statements of the witnesses that this was a concrete test or a test with the Smith mixture (Peterson, R., p. 465), are palpably deceptive.

Incidentally this testimony discredits respondents' entire testimony, on the face of the record (*falsus in uno, falsus in omnibus*). This applies to all three of respondents' witnesses, Hackley, Wilkins (R., p. 447), their expert, and Peterson.

The foregoing demonstrates three things, to-wit:

1. That the respondents in an attempt to anticipate the McMichael patent were obliged to depend upon an old paper patent granted in 1872 and never heard of in the practical art.

2. That to support the utterly inadequate showing of the patent they felt obliged to resort to tests using a mixture having an absurd proportion of water.

3. That the entire defense was of such a character that the trial court should have thrown it out.

The Court of Appeals in its opinion says that the testimony regarding the alleged tests of the Smith apparatus is "undisputed." *It is not necessary to dispute testimony which if true would be worthless, and which is palpably false.*

The Trewent British patent in the Ulen record which proposed to float ashes in a column of water by using compressed air jets, is no more relevant than the Smith patent, and vice versa.

The Kolsche German Patent of 1880 Has No Velocity Nozzle.

On page 98 of his brief respondents' counsel contends that the old Kolsche German patent (Exhibit Book, p. 183) has the velocity nozzle which is such a vital and indispensable feature of the McMichael invention and of petitioner's and respondents' machines.

The Kolsche patent clearly does not have a velocity nozzle, for a "velocity nozzle," within the lexicon of McMichael's patent, is one which discharges a high pressure "jet" of air *at the place where the concrete is crowded and packed* into the tapering exit of the container under the pressure of the air behind the mass.

The large diameter tube *a* of Kolsche is nothing but an extension of the conduit proper. It leads to a *blower or fan* which sets up a *current* of air which carries along *in suspension* small particles of sandy or granular material which trickle into this air current,—a kinetic conveyor pure and simple. A *blower or fan* is a device for delivering large quantities of air at little or no pressure. The low pressure air current set up by the blower or fan of Kolsche, and delivered through the large diameter tube or nozzle *a*, performs no function like that of the "velocity nozzle" of McMichael, which discharges a "jet" of high pressure air against *compacted materials* at the outlet of the container.

For Discussion of McMichael's Supplemental Oath and Answer to Respondents' Criticism of His Application See Our Brief in Powers-Kennedy Case (No. 501) Pages 36-47.

The supplemental oath actually recited claims 1, 2, 4 and 6 of the patent as issued, with only slight, immaterial changes in claims 1 and 2, and recited other claims as broad as any others here in suit.

Epithets.

Respondents' brief teems with opprobrious adjectives applied to petitioner's counsel and brief. The words: "misleading exhibit" (p. 5), "trick drawing" (p. 5), "imposition on this court" (p. 7) "bogus drawing" (p. 8), "sinister motive" (p. 8), "hoodwinked the New York Court" (p. 60), "misleading and deceptive charts" (p. 72), "distorting charts" (p. 72) "falsifying records" (p. 72), "misrepresenting testimony" (p. 72) "spurious drawing" (p. 82), "attempted imposition on this Court" (p. 82) "bogus drawing" (p. 82) flow trippingly from the pen of respondents' counsel.

Some counselors seem to find it easy to interlard their discussion of their opponent's arguments with such devastating adjectives. We suspect, however, that courts learn to discount such language when too freely used.

We shall not attempt to exercise ourselves over every opprobrious epithet which respondents' counsel has applied to us and our brief.

We shall content ourselves by referring to the facts which have sufficed to inspire the use of a few only of these terms by respondents' counsel.

The "Trick Drawing."

(Respondents' Brief, pp. 6-8.)

By the language last quoted, respondents' counsel assails the drawing Exhibit 13 (Exhibit Book, p. 84) which illustrates the machine which Oxenham saw (Rec., p. 78) in operation in the Skagit River tunnel on October 10, 1923, and of which, in his presence, were taken the photographs appearing on pages 85 and 86 of the Exhibit Book.

The first criticism of the drawing seems to be that it shows an upper air pipe 29, whereas respondents claim that this pipe was never used in practice. The photographs (Exhibit Book, pp. 85 and 86) distinctly show that this pipe was present when Oxenham's photographs were taken. Note the pipe 29 in the upper photograph on Exhibit Book, page 86. Petitioner has never contended that this pipe was being used when Oxenham saw the machine. As a matter of fact, its inner end was capped (closed) when Oxenham saw it (Rec., p. 80) and *is so shown in the drawing.* There should be no quibbling about this matter. The drawing simply shows the pipe 29 exactly as Oxenham saw it and as recorded by the photographs taken at the time. Hackley, on Record, page 86, says that one of his machines did have the unused pipe 29.

If pipe 29 had been left out of the drawing, and had thus failed to correspond with the photographs, petitioner would doubtless have been charged with a "sinister motive" in the omission. Having shown the machine exactly as it was, we are charged with offering a "bogus drawing" because the pipe, though present, was not used.

We think it should be obvious why the pipe 29 was

first provided and subsequently capped. Knowing that pressure above the concrete was essential, Mr. Hackley provided the pipe 29 to be sure that such pressure was obtained. As soon as he found that sufficient pressure above the concrete was created by the air admitted through the pipes 28-A, 27-A, 26-A and 25-A, he simply closed off the pipe 29 as being unnecessary. To have retained it would have required another valve for the operator to manipulate.

The second criticism of the drawing appears to be that on the trial the illustration of pipe 27-A was changed (by the witness Brock, Rec., p. 131) to show it discharging horizontally instead of vertically. When Oxenham and McCaleb saw the machine, this pipe did discharge vertically. In subsequent Hackley machines used on the Skagit River job (and Hackley says there were several—Rec., p. 75) this pipe discharged horizontally, as remembered by Hackley and Brock. Therefore, the drawing was changed by Brock in the hope of avoiding controversy about an unimportant detail. The Hackley machine embodies the McMichael invention, regardless whether this air pipe 27-A discharges vertically or horizontally. Moreover, the Hackley machine would be a McMichael machine even if this air pipe 27-A were entirely eliminated. It is merely one of several pipes, remote from the velocity nozzle 25-A, which is responsible for the pressure which is maintained above and behind the concrete in the machine chamber.

No useful purpose can be accomplished by quarrelling about slight differences between the early machine which Oxenham saw and photographed and the later machine shown in the drawing of the Hackley patent. *It is admitted by respondent that the Hackley patent correctly illustrates and describes the Hackley machine* (Respondents' Brief, p. 8). Both forms of the Hackley machine

embody the same essential elements and operate in the same way to accomplish the same result. With this Hackley agrees. He testified:

> "Q. Do you attribute any difference in mode of operation to those slight differences which you allude to?
>
> "A. No, no difference." (Rec., p. 76.)

Even respondents' counsel does not attempt to point out any functional difference between the early machine as shown in the drawing Exhibit 13 and the later machine as disclosed in the Hackley patent. There is none.

Mr. Townsend wastes paper in assailing Exhibit 13 as "deceptive" and "trick" and "bogus" only because he wishes to raise a smoke screen to confuse the real issues of this case.

Petitioner's Impact Device With Gauges Not Impractical.

(In reply to Respondents' Brief, p. 71.)

Respondents' contention that the gauge pipes would clog and that the gauges would act too slowly, are most emphatically answered by the fact that the gauges did work satisfactorily. The only possible theory upon which Mr. Hackley's opinions quoted on page 72 of Respondents' Brief could be correct, is that Mr. Ray perjured himself in testifying about his tests and faked the gauge charts which he produced.

The reason that the pipes to the gauges did not clog undoubtedly was because the periods of highest pressure *followed* the slugs, wherefore there was little tendency to blow concrete into the gauge pipes. If the entrance to any gauge pipe had become clogged, the expansion of the air in the gauge pipe at the time of the next decrease in pressure in the conduit would have cleared out the obstruction.

A gauge does not have to be very fast to record one or two slugs per second, this being the number indicated by both petitioner's and respondents' tests.

Petitioner's "Misleading and Deceptive Charts."
(Respondents' Brief, Page 72.)

Why respondents' counsel should feel called upon to accuse petitioner's counsel of "falsifying records and misrepresenting testimony" is inconceivable.

The only difference between petitioner's oscillograph chart and respondents' oscillograph chart resides in the non-crossing of the light beams in petitioner's and the crossing of the light beams in respondents'. Petitioner has shown ample grounds for its contention that the light beams did not cross as respondents contend.

Mere differences of opinion or different conclusions based upon fundamental facts do not warrant a charge of fraud. On page 78 of Respondents' Brief, counsel attempts to explain the fact that the upper line of the oscillograph record, Exhibit 189, is broader than the lower line because the light beam creating the lower line was in more rapid motion than that creating the upper line. The insufficiency of this explanation is apparent from the fact that there are many places along the curves where for a period of short duration there was no motion in either the upper curve or the lower curve. Wilkins' error in properly identifying the oscillograph curves with the electrodes is apparent at any of these stationary positions, even if respondents' counsel were right in his statement that a rapidly moving light beam traces a narrower line. See, for example, the position about half way between the five and six-second marks and again the position just following the six-second mark where no substantial movement is shown in the light beam tracing

the lower curve, and at which positions the widths of the lower and upper curves can be readily compared.

In his desperation, respondents' counsel attempts to explain (page 79) the greater width for the upper oscillograph curve by the fact that the light beam is deflected perpendicularly to the film.

In the design of an oscillograph machine, the distance from the mirror to the film is so great (about 16 inches) that a deflection of one inch across the film would make no noticeable difference in the width of the line traced. Mathematically, a spot which is 0.0625 of an inch in width, if projected perpendicularly from a distance sixteen inches away from the film, will be 0.06262 of an inch in width if projected to a position one inch away from the perpendicular.

On page 80 of Respondents' Brief occurs an attempted explanation of the fact that the lower oscillograph curve drops below the line A-D which respondents contend to be the base line for that curve. This contention is paramount to saying that a greater amount of moisture clings to the surface of the rubber pipe, providing a current path between the upper electrodes, when the apparatus is not in operation, than is present when the concrete is being discharged. This might be conceivable with respect to the lower electrodes, but it is hardly conceivable that a greater amount of moisture would remain across the top of the rubber pipe between concrete discharges than is present all of the time during a discharge. Our contention is that the greater degree of wetness in the rubber pipe during operation is responsible for the major part of the deflection of the light beams and that the concrete only changed this slightly as the slugs passed.

Petitioner's "Spurious Drawing."
(Respondents' Brief, p. 81.)

Respondent says, "Anyone knows that to foreshorten even a straight piece of string is to cause it to fold and no longer become straight." The fact that a string may crinkle when its ends are brought closer together is beside the point. A perfectly straight line foreshortened photographically will still be a perfectly straight line. The photograph of Defendants' Exhibit 189 appearing at the bottom of the plate opposite page 82 of Respondents' Brief is a foreshortened photograph in that it is reproduced on a smaller scale than the original. By the method of reproduction, this photograph was narrowed proportionately to its foreshortening. In the production of petitioner's Plate 5, the Exhibit 189 was photographically reduced in length without materially altering the original height of the deflections. As explained in our main brief, petitioner has reproduced photographically as nearly as possible, the results which would have been obtained by moving the film through the oscillograph machine at a rate very much less than the rate at which it was actually moved. Petitioner has made this reproduction merely because believing that it brings the facts disclosed by Defendants' Exhibit 189 into a form much more readily analyzed.

Conclusion.

1. The velocity nozzle acting upon the concrete where it is compacted at the exit of the container is of the very essence of the McMichael invention and is recited and stressed in each of the claims in suit.

2. The Ninth Circuit Court of Appeals erred on the

question of validity because failing to appreciate the vital importance of the velocity nozzle and its action upon the concrete where compacted in the outlet under the pressure behind the mass.

3. The Ninth Circuit Court of Appeals failed to appreciate the compelling significance of the fact that respondents, like the infringers in the Second Circuit cases, insist upon using the velocity nozzle located precisely where taught by McMichael.

4. Neither the Duckham British patents of 1875 and 1885, nor the Smith patent of 1872, nor the Kolsche German patent of 1881, nor the unsuccessful experiments of Larkin and Leake, *nor any of the other devices to which respondents give their praise,* had the velocity nozzle or anything resembling it in either location or function.

5. McMichael, *to whom respondents pay the tribute of imitation,* was the first to combine with pressure behind the mass a velocity nozzle acting upon the concrete where compacted at the exit of the container.

6. The respondents' (Hackley) apparatus here involved is substantially identical with the device of the McMichael patent and the devices held to infringe in the Ulen and Powers-Kennedy cases.

7. The Second Circuit Courts properly understood the McMichael invention and properly interpreted and construed the patent in suit.

8. The Ninth Circuit Court of Appeals did not properly understand the McMichael patent and erred, as a matter of law, in giving it a construction more limited than its claims,—much more limited than the scope accorded to it by the Second Circuit Court of Appeals.

9. The decision of the Second Circuit Court of Appeals in the Powers-Kennedy case was right and should be affirmed.

10. The decision of the Ninth Circuit Court of Appeals in this case was in error and should be reversed.

Respectfully submitted,

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